

Docket No. 1539.1002RE/JGM/DMP



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of:

Tomowaki TAKAHASHI

Group Art Unit: 2872

U.S. Serial No.: 09/659,375

Examiner: J. Henry

Filed: September 8, 2000

(Reissue Application for U.S. Patent No. 5,805,334 issued September 8, 1998)

For: CATADIOPTIC PROJECTION SYSTEMS

**SUPPLEMENTAL REISSUE APPLICATION DECLARATION UNDER 37 C.F.R. § 1.175**

Assistant Commissioner for Patents  
Washington, D. C. 20231

Sir:

I, Tomowaki TAKAHASHI, declare that:

1. My residence, post office address and citizenship are as stated below next to my name.

2. I believe I am the original, first and sole inventor of the subject matter which is described and claimed in U.S. Letters Patent No. 5,805,334 ("the '334 patent") granted on September 8, 1998, and for which invention I solicit a reissue patent on the invention entitled CATADIOPTIC PROJECTION SYSTEMS, the specification of which was filed on September 8, 2000 as reissue application no. 09/659,375.

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3. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims as amended in the above referenced reissue application.

4. I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

5. I hereby claim priority benefit under Title 35, United States Code, Section 119(a)-(d), of Japanese patent application no. 8-149903, filed May 20, 1996.

6. I believe the original '334 patent to be wholly or partly inoperative or invalid by reason of claiming more or less than I had the right to claim in the patent.

7. With respect to broadening the claims, one error being relied upon as the basis for the reissue is that issued claims 1 and 10 are unduly narrow in reciting a catadioptric projection system comprising a first imaging system comprising single-pass and double-pass lens groups, with the specific path of the light traveling through the first imaging system specified. Accordingly, claim 27 has been drafted without these unduly narrow limitations to recite "a catadioptric imaging optical sub-system comprising an optical group to form an image of the pattern, the optical group comprising a concave mirror with a first optical axis" to remove the unnecessary groupings. An additional error being relied upon as a basis for the reissue is that issued claims 17 and 18 are unduly narrow in reciting an operation of "providing

within the single-pass lens group, from objectwise to imagewise, a first negative subgroup, a positive subgroup, and a second negative subgroup" as recited in claim 17, and "providing a first imaging system comprising a single-pass lens group including from objectwise to imagewise, a first negative lens subgroup, a positive lens subgroup, and a second negative lens subgroup; and a double pass lens group comprising a concave mirror" as recited in claim 18. Accordingly, claim 58 has been draft to recite using the first and second imaging systems without reciting an operation of providing the first imaging system or elements thereof.

8. All errors, including those listed above, which are being corrected up to the time of filing of this reissue declaration arose without any deceptive intention on the part of the applicant (37 CFR §1.175(a)(2)).

9. I hereby appoint the attorneys and/or agents of Staas & Halsey LLP under USPTO Customer No. 21,171 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please send all correspondence related to the above-identified application to the following address:

Staas & Halsey LLP  
700 Eleventh Street, N.W.  
Suite 500  
Washington, D.C. 20001

Docket No. 1539.1002RE/JGM/DMP



21171

PATENT TRADEMARK OFFICE

10. I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first or sole inventor Tomowaki TAKAHASHI

Inventor's Signature Tomowaki Takahashi Date Aug. 29, 2001  
Country of Citizenship Japan  
Residence Yokohama, Japan

Post Office Address c/o Nikon Corporation, Fuji Bldg., 2-3, Marunouchi 3-chome,  
Chiyoda-ku, Tokyo 100-8331 Japan